EKI 791 Red Rock Road • St. George, Utah 84770

8085 *
4-9 NO-CONNECT
11, 21-29

PINS
20, 7, 9, 12 – NOT CONNECTED
15 – NOT CONNECTED

EKI MICRO-MENTOR™ S

PROGRAMMER AND MEMORY READER

R11-R24 ...
220Ω

+5V

Hexidecimal Readout

LED Binary Readout

LED 7 LED 6 LED 5 LED 4 LED 3 LED 2 LED 1 LED 0

DOUBLE SEVEN-SEGMENT DISPLAY
Display 2 Display 1
A B C D E F G

R3 R4 R5 R6 R7 R8 R9 R10 220

IC9 7400 LED Buffer
IC8 7400 LED Buffer
IC7 7447 7-Segment Decoder
IC6 7447 7-Segment Decoder

AD0 J1/9
AD1 J1/10
AD2 J1/11
AD3 J1/12
AD4 J1/13
AD5 J1/14
AD6 J1/15
AD7 J1/16

R25 1K R26 1K R27 1K ALE S7 R28 1K

J1/6 J1/7 J1/5 J1/8 J1/2 J1/3

A15 WR S8

RESET IN IO/M

Hexidecimal Counter
IC4 7493
IC5 7493
Hexidecimal Counter

Prog/Incr switch
Increment High Order Counter S3
S4B S4A
Increment Low Order Counter S2

IC3 555 Clock
C4 .01uF
R29 33K R30 10K C3 10uF

To increase the speed of the clock reduce R29 to 15K

S6 Reset J1/1 R31 220ohm

R32 1K Read J1/4

Write

Read/Write Switch S5A S5B

SSB

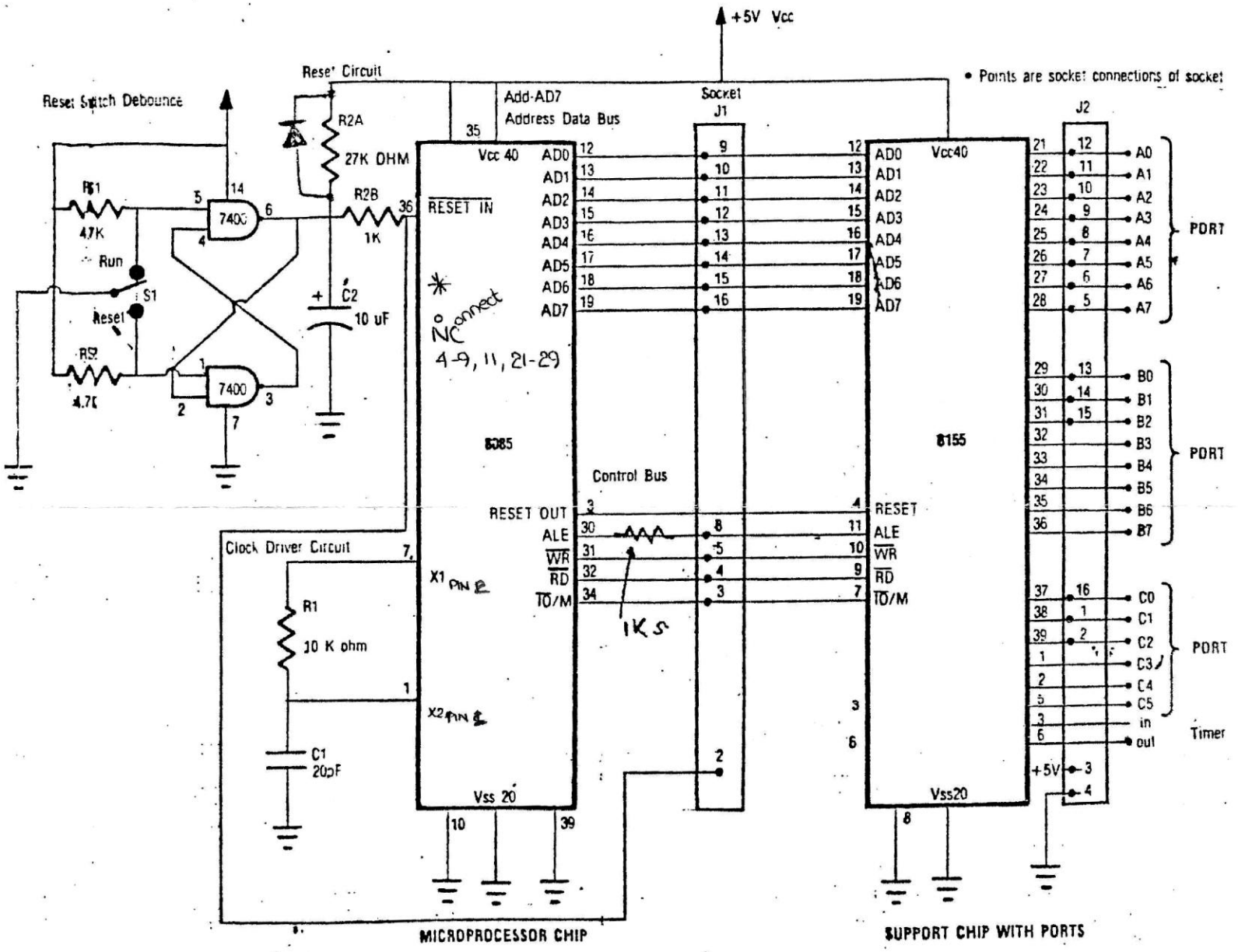
● Pins of Socket J1 (16 pins J1/1 through J1/16)

CHEMATICS

X_1 = PIN 2
X_2 = PIN 1

LED

PROCESSOR BOARD



NOTE: WE HAVE DEBOUNCED THE RESET SWITCH USING 2 GATES OF A 7400 AND TWO RESISTORS RS1. and RS2. IF THE RESET SWITCH BOUNCES, IT MAY CAUSE THE PROGRAM TO BE ERASED.

Complete Schematic
Nov 1984